AWARD

Alternative Water Resources and Deliberation processes to renew water supply strategic planning

Deliverable 2.3: Policy Brief #2

Enabling Public Trust in Water Innovation: A Pathway towards Alternative Water Resources Adoption in the European Water Resilience Strategy context

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This document arises from the European project Alternative Water Resources and Deliberation process to renew water supply strategic planning (AWARD), which has received funding from the European Union, under the Grant Agreement N° 101136987.

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ENABLING PUBLIC TRUST IN WATER INNOVATION: A PATHWAY TOWARDS ALTERNATIVE WATER RESOURCES ADOPTION IN THE EUROPEAN WATER RESILIENCE STRATEGY CONTEXT

HIGHLIGHTS

- Limited adoption of Alternative Water Resources (AWR) stems from both information gaps and poor communication, leading to low public acceptability.
- The European Water Resilience Strategy (EWRS) stresses that the EU cannot rely solely on conventional freshwater and aims to improve water efficiency by 10% by 2030, achievable through mainstreaming AWR.
- To achieve this mainstreaming, the public must first be made aware of AWR's benefits and then come to accept these solutions as part of the norm.
- Based on a study involving over 400 citizens and some experts, aimed at strengthening the role of AWR in implementing the EWRS and increasing its social awareness and acceptability, AWARD advises policymakers to:

Embed water literacy into climate and environmental education

Empower communities by building trust and designing local and regional awareness campaigns

Develop accessible and citizen-friendly communication platforms

Promote local demo projects in Local Water Forums fostering citizen dialogue and support for AWRs.

EUROPEAN WATER RESILIENCE STRATEGY (EWRS)

On 4th June 2025, the EC presented the EWRS, a policy designed to tackle increasing water scarcity, water pollution, and climate-driven weather extremes (such as droughts). Its goal is to ensure that all European citizens have access to clean, affordable, and reliable water supply, while helping ecosystems and economies adapt to a rapidly changing environment – also in the future. To accomplish this, the EWRS has **three major objectives**, or "pillars":

1. **Restoring the water cycle** – by protecting rivers, wetlands, and floodplains, deploying nature-based solutions (NbS) and transforming cities into "sponge cities" to reduce flood and drought risks.

2. **Creating a water-smart economy** – by promoting efficiency across all sectors, reducing leakage, upgrading infrastructure, and, crucially, expanding the safe use of AWRs such as treated wastewater and rain-/stormwater.

3. **Guaranteeing clean and affordable water for all** – by strengthening water governance, improving pricing and awareness, and reinforcing Europe's role in global water cooperation.

A key strength of the EWRS is recognizing that the EU cannot depend solely on surface and groundwater. With droughts expected to intensify, the EU targets a 10% water efficiency gain by 2030 — achievable only if AWR become mainstream. The EWRS allocates over €15 billion (2025–2027) for flagship actions and prioritizes tackling water pollution, including emerging threats like PFAS, which challenge safe water reuse.

AWARD DEMO CASES' ADVICE TO STRENGTHEN THE ROLE OF AWR IN EWRS OPERATIONALIZATION

Bucharest Demo Case

Through the Bucharest Demo Case, AWARD contributes to the European Water Resilience Strategy (EWRS) by demonstrating how integrated urban water management and accurate water balance assessments can guide resilient planning and design. The demo case supports EWRS by promoting the reuse of local water, helping restore the urban water cycle, and demonstrating innovative, replicable solutions for a more climate-resilient city.

Increasing recharge of top groundwater layer, naturally treating and then infiltrating rainwater and stormwater; support Municipalities and water utility to use groundwater stored in the top layer for not potable use (public garden irrigation, street cleaning, etc.).

Milan Demo Case

Cyprus Demo Case

The Cyprus Demo Case demonstrates how, safe reclaimed water use combined with strong monitoring and transparent reporting, improves water efficiency and reduces dependence on desalination and groundwater. In Cyprus, reclaimed water currently meets about 15% of irrigation demand, with a target of 40% by 2025, strengthening regional water security and resilience (supporting the EWRS goal of a 10% water-use reduction by 2030).

Promotes organized stormwater reuse to improve water availability while reducing potable water consumption. Stakeholder engagement incentives from local to European levels demonstrate how participatory AWR management strengthens water resilience and supports EWRS implementation through collaborative governance.

Santiago de Compostela Demo Case

LIMITED PUBLIC AWARENESS AND ACCEPTABILITY

Despite rising pressure from climate change, population growth, and resource scarcity, AWR adoption remains low due to **limited public awareness and poor communication**. Many citizens struggle to understand AWR risks, costs, and benefits, leading to confusion and low trust.

SOCIAL AWARENESS AND ACCEPTABILITY SURVEY FINDINGS IN AWARD

Most respondents show moderate to high awareness of global water issues but lack deeper understanding, highlighting the **need for better education—especially in less water-stressed countries**. Awareness of AWR is much lower, even in stressed regions like Italy, Spain, and Cyprus, though **strong public willingness to support AWR** suggests high potential if information and visibility improve.

Poor communication from utilities and authorities about AWRs fuels confusion, low trust, and missed engagement. Though public awareness is limited, **demand for clear information** and participation is strong. Future success depends on transparency and inclusive tools like Local or Climate Forums.

While basic water services have moderate satisfaction, innovative solutions score low due to limited visibility and public involvement. Citizens want to engage in local water governance but need accessible information, institutional trust, and **clear participation pathways**. Success requires combining digital tools and climate-smart strategies with citizen-focused communication.

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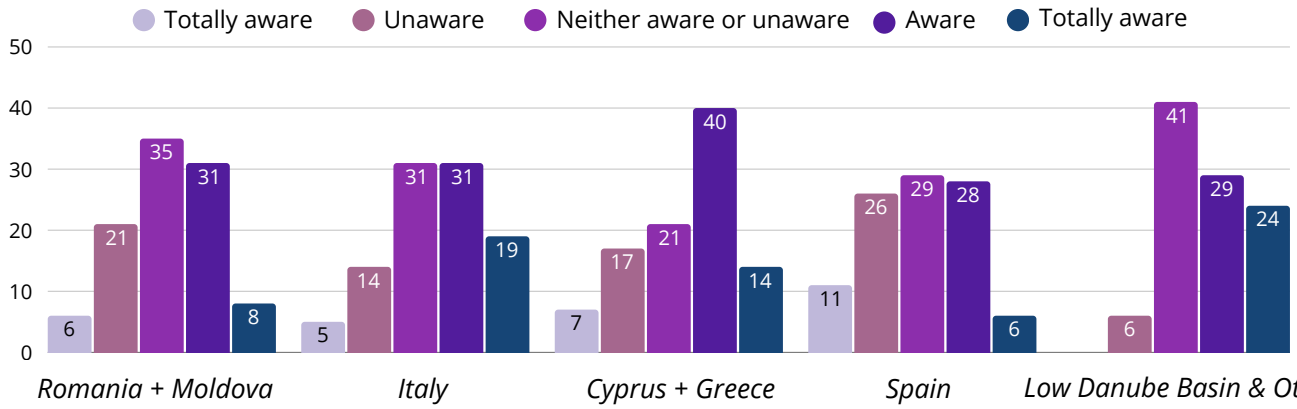
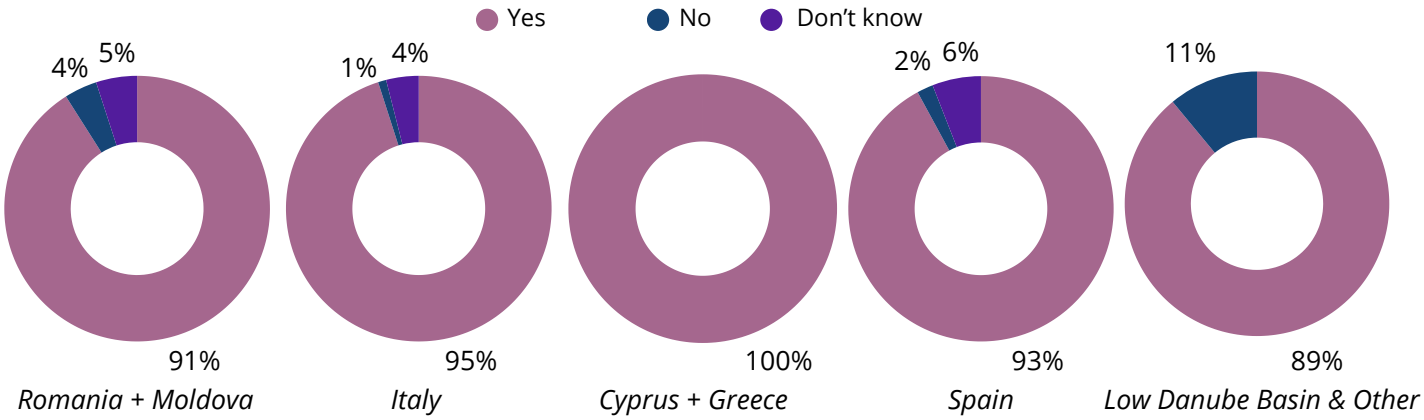
SOCIAL AWARENESS AND ACCEPTABILITY SURVEY

Extracted for Policy Brief#2 deliverable, for more information, please scan the **QR code on page 4**.

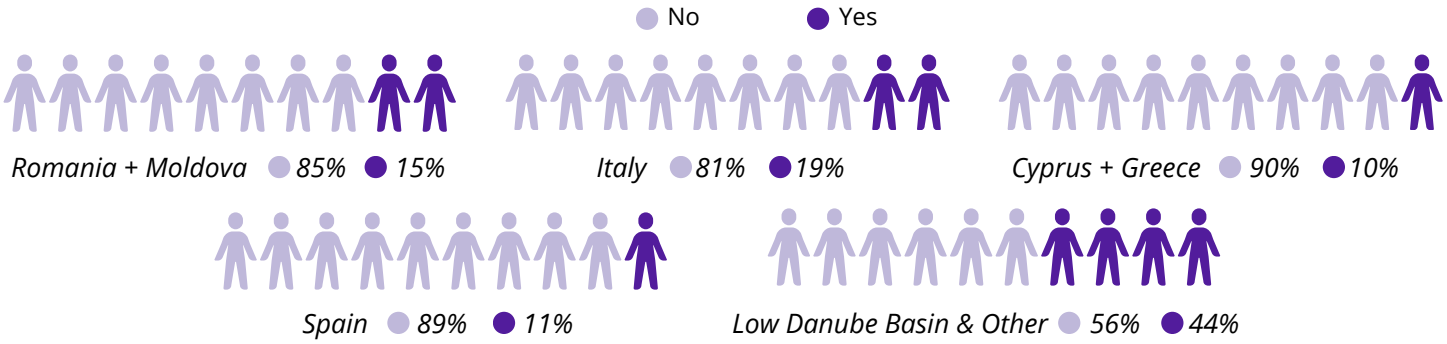
Awareness on Alternative Water Resources



Need for More Information about Water-Based Services



Participation in Local Decision-Making Processes in the Water Sector



AWARD POLICY RECOMMENDATIONS ON INCREASING SOCIAL AWARENESS AND ACCEPTABILITY OF AWR

EMBED WATER LITERACY INTO CLIMATE AND ENVIRONMENTAL EDUCATION

Incorporating water issues into education at all levels is crucial to raise awareness of global challenges that influence the local challenges. Using **real-world examples** and **interactive formats** links water, climate, and behaviour, showing impacts on health, economy, and resilience. Strengthening water literacy supports informed decisions and builds confidence in innovation.

DEVELOP ACCESSIBLE AND CITIZEN-FRIENDLY COMMUNICATION PLATFORMS

Promote user-friendly platforms—**digital apps**, utility **dashboards**, and municipal **bulletin boards**—to provide clear updates on AWR use and water quality. Inclusive, intuitive design ensures all citizens, including those with limited digital access, can engage, fostering trust and transparency.

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EMPOWER COMMUNITIES BY BUILDING TRUST AND DESIGNING LOCAL AND REGIONAL AWARENESS CAMPAIGNS

Supporting civil society is key to linking experts and citizens in sustainable water management and AWR. Inclusive platforms—forums, **workshops**, and pilot sites—build trust and understanding. Local **campaigns** should counter misinformation, highlight benefits, and use trusted messengers and local languages. Emphasizing water scarcity's human and environmental impacts and promoting rainwater harvesting fosters shared responsibility, while **digital and in-person tools** enable meaningful, lasting engagement.

PROMOTE LOCAL DEMONSTRATION PROJECTS WITH CITIZEN INVOLVEMENT FOR LOCAL COMMUNITY BENEFITS

Equitable access to AWR requires affordable, **community-based** pilots that demonstrate social and environmental benefits. Visible projects like rainwater harvesting at schools or farms, supported by open days and NGO partnerships, build trust and awareness. **Shifting from consultation to co-creation** involves citizens in planning and monitoring, aligning innovation with local needs. Integrating these participatory methods into regional planning strengthens community ownership and links AWR to local benefits such as savings and green jobs. Strengthened Local Water Forums—co-designed and **co-led with citizens**—are vital for trust, inclusiveness, and lasting support.

METHODOLOGY

The AWARD Policy Brief was developed based on an extensive cross - country report on social awareness and acceptability survey, elaborated under Task 2.2. (see Annex 1). It involved surveying a total of **439 citizens from all demo case countries and other countries from the Lower Danube Basin**. The survey was conducted both online (429) and with direct interviews (10). Data collection lasted from March 2024 until December 2024. Each AWARD partner translated the survey to local language. Respondents were randomly selected, representing the citizens without prior knowledge or awareness of AWR. The conversion of the results into a study was done based on a comparative analysis, where key similarities were highlighted and trends were identified. The social barriers listed in Table 1, together with the findings from the cross-country report justify the need for the AWARD recommendations included in this Policy Brief.

ABOUT AWARD

AWARD is funded by the European Commission through Horizon Europe, and coordinated by OiEau, running from 2024 to 2027. AWARD acknowledges the urgency of addressing water scarcity and the impacts of climate change while recognizing the need for an integrated approach that engages society, science, and policy in the development of knowledge and strategic water planning.

AWARD's overarching objective is to generate evidence-based knowledge and lessons learned on how to effectively integrate affordable, acceptable, and reliable AWR solutions into strategic water supply planning and implementation while accounting for the effects of global change.

This will contribute to recommendations for the broader implementation of AWRs, considering the four dimensions of social innovation: technology, capacity development, governance & policy, and economic assessment.

REFERENCES AND ANNEXES

Sources

Annex 1. AWARD Cross-Country Report on Social Acceptability of Alternative Water Resources

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DOCUMENT INFORMATION

Grant Agreement N°	101136987
Project Acronym	AWARD
Project full name	Alternative Water Resources and Deliberation process to renew water supply strategic planning
Start of the project	1 January 2024
Duration	36 months
Deliverable	**D2.3: Policy Brief # 2**
Work Package	**WP2: Socio-political support and engagement for AWR management**
Task	Task 2.2: Increase social awareness and accountability on AWRs
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Quality check	Simos Malamis (NTUA), Martin O'Connor (ePLANETe Blue)
Due Date	October 31st, 2025
Delivery Date	November 30th, 2025
Explanation of the delay (if any)	Improvement of the visual aspects of the policy brief, including improving the explanation of the evidence-based findings
Citation	Nanu C. et. al. (2025): Policy Brief #2. *Enabling Public Trust in Water Innovation: A Pathway towards Alternative Water Resources Adoption in the European Water Resilience Strategy context,* Deliverable 2.3, Public, EU Horizon AWARDProject, Grant agreement N° 101136987
Dissemination Level	Public

REVISION HISTORY

Version	Date	Who	What
V0.1	01/07/2025	Raluca Mihai, Claudia Petrescu	Preliminary draft
V0.2	10/07/2025	Ciprian Nanu	Elaboration draft
V0.3	22.08.2025	Florentina Nanu	Elaboration draft, internal review
	25.08.2025	Project partners	Review final draft, additional input
	15.09.2025	Martin O'Connor, Simos Malamis	Peer review
	01.10.2025	Raluca Mihai, Ciprian Nanu	Integrate the received input
	05.10.2025	Raluca Mihai, Ciprian Nanu, Florentina Nanu, Marie Soutin	Adjust after RP1 review meeting
	15.10.2025	Marie Soutin, Ciprian Nanu, Florentina Nanu	Adapt final draft for visual format
	15.11.2025	Marie Soutin, Marie Paule Adde, Thelma Pellicer, Ananda Rohn	Final draft review
V F	20.11.2025	Marwan Shamekh	Final document review

Related Deliverables and Work Packages' connection

The current deliverable D2.3 AWARD Policy Brief #2 is part of a series of 3 policy briefs reports (D2.2, D2.3 and future D2.4) and provides an overview of the importance of diversifying the AWR methods addressed in the AWARD project and a wider perspective for streaming AWRs for increased water resilience. It offers data, statistics, recommendations and other relevant information obtained in the AWARD project.

The deliverable D2.3 is linked with activities in Tasks T2.2 (Increase social awareness and accountability on AWRs) and T2.3(Policy support and planning towards water supply planners into action).

TABLE OF CONTENT

LIST OF ACRONYMS

AI	Artificial Intelligence
CA	Consortium Agreement
AWARD	Alternative Water Resources and Deliberation process to renew water supply strategic planning
AWR	Alternative Water Resource
CAPEX	Capital Expenditures
EC	European Commission
EU	European Union
EIB	European Investment Bank
EQS	Environmental Quality Standards
EWRS	European Water Resilience Strategy
OECD	Organisation for Economic Co-operation and Development
OPEX	Operating Expenses
GA	Grant Agreement
MAR	Managed Aquifer Recharged
NbS	Nature Based Solutions
RBMP	River Basin Management Plan
WP	Work Package

LIST OF TABLES

I HIGHLIGHTS (EXECUTIVE SUMMARY)

The current report aggregates findings from activities carried out in AWARD demo cases as regards understanding of the social awareness and acceptability of alternative water resources (AWRs). The findings were analysed in the context of the recent European Water Resilience Strategy (EWRS) formulating a set of recommendations for adaptation of policies to facilitate AWRs uptake.

The European Water Resilience Strategy (EWRS) impact

The **European Water Resilience Strategy (EWRS)** adopted in June 2025, is acknowledged by the AWARD consortium as a robust opportunity to streamline water-smart practices providing a strengthened frame for AWARD activities in the demo cases in Romania, Italy, Cyprus, and Spain, creating new opportunities for investigating new collaboration models for upscaling the project results.

- The EWRS sets **EU-wide targets**: reduce water use by 10% by 2030, cut leakage and promote a "water-smart economy" with non-conventional sources.

- **Policy coherence**: The EU Water Reuse Regulation (2020/741) is now central, requiring AWARD demos to align with risk management plans, urban planning, and monitoring to build societal acceptability.

- **Nature-based solutions & digitalisation** are emphasized, including green infrastructure, AI, and data-driven management for aquifer recharge, stormwater harvesting, and urban water accounting.

- **Funding opportunities**: The European Investment Bank has allocated **€15 billion (2025–2027)** for water projects under EWRS, with potential to attract private investment and scale up AWARD demo sites.

Based on a study involving over 400 citizens and some experts, aimed at strengthening the role of AWR in implementing the EWRS and increasing its social awareness and acceptability, AWARD advises policymakers to:

- **Embed water literacy into climate and environmental education**

- **Empower communities by building trust and designing local and regional awareness campaigns**

- **Develop accessible and citizen-friendly communication platforms**

- **Promote local demonstration projects with citizen involvement for local community benefits**

II Increase social awareness on AWRs

II.1 The context: European Water Resilience Strategy (EWRS)

On 4th June 2025, the European Commission (EC) presented the European Water Resilience Strategy (EWRS), a policy designed to tackle increasing water scarcity, water pollution, and climate-driven weather extremes (such as droughts). Its goal is to ensure that all European citizens have access to clean, affordable, and reliable water supply, while helping ecosystems and economies adapt to a rapidly changing environment – also in the future. To accomplish this, the EWRS has three major objectives, or "pillars":

1. **Restoring the water cycle** – by protecting rivers, wetlands, and floodplains, deploying nature-based solutions (NbS) and transforming cities into "sponge cities" to reduce flood and drought risks.
2. **Creating a water-smart economy** – by promoting efficiency across all sectors, reducing leakage, upgrading infrastructure, and, crucially, expanding the safe use of AWRs such as treated wastewater and rain-/stormwater.
3. **Guaranteeing clean and affordable water for all** – by strengthening water governance, improving pricing and awareness, and reinforcing Europe's role in global water cooperation.

One of the most future-proof aspects of the EWRS is the recognition that the EU cannot rely only on conventional freshwater supplies (i.e., surface water and groundwater). With droughts forecasted to be increasingly common due to climate change, the EU aims to enhance water efficiency by at least 10% by 2030, and this will only be possible if AWR become a mainstream resource. To support the objectives and necessary actions, the EWRS mobilizes over €15 billion in investment between 2025 and 2027, and puts out a significant number of prioritized "flagship actions". The EWRS also takes a strong stance on water pollution water consumption´s "other side of the coin", and puts a special focus on emerging pollutants such as PFAS ("forever chemicals"), which pose serious challenges for safe water reuse.

II.1.1. Demo Case#1 Bucharest: Management of aquifer recharge and rainwater harvesting

- **Recommendations in alignment with EWRS easier operalization:** The AWARD study of the aquifer and the Circus Lake highlighted the need for integrated urban water planning. Capturing rainwater and urban stormwater for aquifer recharge directly supports the restoration of the water cycle and reduces pressure on traditional stressed supplies. Effective integration of rainwater harvesting and stormwater infiltration systems requires a clear understanding of local water flows. The current situation underscores the need of conducting a local water balance assessment to guide the planning and implementation of AWR.
- The lack of standardized guidelines limits the safe implementation of stormwater treatment and surface/subsurface water bodies recharge systems in Romania.
- Rainwater and locally available stormwater should be recognized as renewable sources that can help to reduce pressure on public water supply and wastewater systems, as well as protecting against drought. Positioning demo case #1 as a AWRs pilot within the urban NbS financing agenda could provide a foundation for local, circular, urban, sustainable solutions in the future.

II.1.2. Demo Case#2 Milan: Management of aquifer recharge/ stormwater

- **Recommendations in alignment with the EWRS easier operalization**: Wastewater discharged by the treatment plants is just one possible source of AWR for non-potable uses. Other alternative water resources exist, and their use should be promoted. Rainwater harvesting provides a high-quality resource for various domestic uses, and greywater or stormwater runoff can be easily treated in

decentralised systems (technological or NbS) for reuse in toilet flushing, irrigation, fire prevention, and so on.

- In general, the most important storage volumes are found in the underground aquifers. Water retention measures and MAR systems could increase infiltration and storage in groundwater layers, which could then be used as a water source (with the advantages of lower CAPEX and OPEX and fewer significant environmental impacts compared to other "conventional" storage solutions such as reservoirs).
- The Milan case aims at showing the importance of the concept of "Sponge City" not only to improve urban stormwater management but also to increase the availability of AWR: SUDS designed to maximize rainwater infiltration may act as "Urban Diffused MAR", increasing the availability of AWR stored in the upper groundwater layer. In urban areas such as Milan, the "sponge cities" concept, carved with SUDS using nature-based solutions to absorb and release water in a controlled way, is highly relevant and should be promoted further by coordination with and scaling up of existing initiatives aimed at increasing water retention and storage (e.g. Adaptation and Soil Missions, Guidance on Climate Resilient Landscapes, the Urban Agenda for the European Union (UAEU) Thematic Partnership on 'Water Sensitive City' and Interreg Danube Region Sponge City project).

II.1.3. Demo Case #3 Cyprus: Decentralized nature-based stormwater treatment

- **Recommendations in alignment with EWRS easier operalization**: In Cyprus, one of the most water-stressed EU regions, treated wastewater reuse, is a strategic necessity to reduce irrigation peaks, secure agricultural production, and alleviate demand on scarce groundwater and costly desalination. Scaling up reuse directly supports the EWRS target to cut overall water use by 10% by 2030 and enhances the resilience of the local water cycle.
- The alignment with EU Water Reuse Regulation (2020/741) ensures that reclaimed water meets stringent safety standards. However, restrictive national rules currently limit unrestricted irrigation despite compliance with EU quality thresholds. Updating these frameworks in line with the EWRS would unlock greater reuse potential while maintaining public health safeguards.
- Demonstration of decentralised reuse at the Paralimni–Agia Napa WWTP provides visible community benefits, showcasing how reclaimed water supports farms, urban greening, and tourism-related landscaping. This directly contributes to the EWRS goal of ensuring access to clean and affordable water and strengthening the energy–water nexus by reducing desalination dependency.
- Survey results show Cypriot citizens are highly aware of global water challenges and strongly supportive of reuse initiatives, yet they request better communication and transparency on water quality and services. Establishing permanent Local Water Forums and citizen-friendly dashboards would build trust, encourage co-ownership, and meet EWRS objectives of inclusive governance.
- Mobilising EIB funding under the EWRS would enable replication of reuse schemes in other municipalities and agricultural zones, turning Cyprus into a living laboratory for circular water systems. By linking reuse with agriculture, tourism, and green urban development, Cyprus can demonstrate how reclaimed water underpins a water-smart economy, creating local jobs, reducing costs, and fostering sustainable growth.

II.1.4. Demo Case #4 Santiago de Compostela, Galicia: Stormwater, reuse for irrigation & industry

- **Recommendations in alignment with EWRS easier operalization:** Implement effective incentive mechanisms to enhance stakeholder (including citizens) participation in alternative water resources management, from local to European level. These incentives should demonstrate direct and indirect benefits to participants, fostering greater engagement and successful implementation of water

resilience initiatives. This aligns with governance and implementation objectives and contributes to ensuring continuous access to clean water and sanitation.

- Develop comprehensive urban planning strategies that integrate alternative water resources as key components of urban development, improving both technical aspects and living environment. The integration of AWR in urban planning helps alleviate pressures on traditional water sources, thereby contributing to the protection of the hydrological cycle. This requires dedicated funding streams and incorporation of local knowledge, supporting the development of water-smart economy through digital and AI-driven solutions.
- Focus on awareness and education, implementing educational programs and citizen science initiatives that address alternative water resources. Specifically, citizen science programs should be promoted. Specifically, citizen science programs should be promoted as key tools for data collection, monitoring, and community engagement in water management. This supports research, innovation, and skills development while contributing to restoring and protecting the hydrological cycle through collective resilience building.
- Spain's demo case is considered central to "water-smart economy" and has the potential to be used as best practice for a national water resilience strategy or action plan.

II.2. Social awareness and acceptability of AWRs – defining the policy challenge

Despite growing pressure on water systems resulting from climate change, population growth, and increasing resource scarcity, **the adoption of AWRs remains low, primarily due to limited public awareness and acceptability**. This is not just an informational gap; it reflects a broader failure in the way AWR solutions are communicated, explained and contextualised for the general public. Citizens often find it difficult to understand the associated risks, costs, and benefits, which can lead to confusion and weaken trust and public acceptability.

Recent research (Gullberg et al., 2023) has highlighted that the social acceptability of AWRs is shaped by a complex interplay of factors, including public awareness of water scarcity, the perceived risks and advantages of water reuse, and the degree of trust in institutions that manage water systems (Wolsink, 2018; Al-Saidi, 2021). Often, the failure to tailor communication to citizens' literacy levels and lived experiences results in missed opportunities for engagement and meaningful participation. Without targeted efforts to explain AWRs in accessible, transparent and context-sensitive ways, their potential will remain underutilised, especially in regions where water resilience is urgently needed.

II.3. Challenges and barriers in the AWR awareness and acceptability

Based on their desk research, expertise, and data collected throughout the project, the partners evaluated the social barriers to the adoption of AWR based on a unitary questionnaire developed by the work package leader in which the social barriers were grouped into six categories, identified through the literature review (see Table 1):

1. Concerns about potential environmental or social impacts: Resistance from farmers and the public due to concerns over health risks, costs, maintenance, and consumer acceptability (López Serrano et al., 2022; Sapiano, 2024).
2. Economic concerns: Concerns that reclaimed water might harm industries like agriculture and tourism (Fidélis, et al, 2020).
3. Lack of available information: Limited transparency and inaccessible data hinder stakeholder understanding (Fidélis, et al, 2020).

4. Spread of misinformation: Misconceptions and fears about recycled water (Guerra Rodríguez (2020)) such as microbiology, micropollutants, and microplastics (Ramm, 2024) reduce public acceptability.
5. Inadequate community engagement: Lack of community involvement in planning and decision-making fosters resistance (ICRA Costa Brava, 2024).
6. Exacerbation of inequalities: Fears of worsening inequalities in water access or affordability limit public support.

Table 1. Social barriers to AWR in project countries

Types of social barriers to mainstreaming AWR	Barrier level		
	Weak barrier (No barriers have been faced)	Medium barrier (Barriers are manageable and can be addressed with minor adjustments)	Strong barrier (Significant barriers that can be overcome with substantial adjustment)
B1. **Concerns about potential environmental or social impacts**		**IT, CY, RO, ES**	
B2. **Economic concerns**	**CY, RO**	**IT**	**ES**
B3. **Lack of available information**	**IT**	**CY, RO, ES**	
B4. **Spread of misinformation**	**IT, CY**	**RO, ES**	
B5. **Inadequate community engagement**	**IT**	**CY**	**ES**
B6. **Exacerbation of inequalities**	**IT, RO, ES**	**CY**	

Source: AWARD product based on AWR4C cluster activities

II.3.1. Concerns about potential environmental or social impacts

The concerns about the potential environmental and social impacts of AWRs are consistently acknowledged in all national contexts of AWARD (Italy, Cyprus, Romania, and Spain) and generally considered manageable, becoming more controllable over time but still persistent. In Italy, these concerns have gradually diminished following improved public communication of the health risks, costs, maintenance requirements, and the implementation of AWR pilot projects. In Cyprus, restrictive national laws may exacerbate public unease if policy shifts allow more liberal irrigation practices. Romania reports significant public resistance due to perceptions of health risks and costs, highlighting the need for communication campaigns. Spain shows conditional acceptability, contingent on water quality assurance. These findings suggest a shared need for public reassurance through transparent risk communication and quality standards.

II.3.2. Economic concerns

These concerns are more prevalent in Italy, where they are manageable, and in Spain, where they pose a significant barrier, particularly in tourism-related areas. In contrast, Romania and Cyprus report minimal or no economic apprehension. This variation suggests that public perception is shaped by sectoral sensitivities (e.g. tourism in Spain) and regulatory environments. Enhancing the narrative around nature-based solutions (NbS) and their economic benefits could help to mitigate economic resistance in more sceptical contexts.

II.3.3. Lack of available information

Transparency and information access remain challenges, especially in Cyprus, Romania, and Spain. While Italy reports no major issues, other countries mention insufficient awareness and limited access to quality data as

barriers to public and stakeholder support. Community-targeted information campaigns, interactive formats, and localized communication channels are needed to bridge this gap and empower citizen participation.

II.3.4. Spread of misinformation

Misinformation appears to be a more significant issue in Romania and Spain. In both countries, the absence of clear public communication and technical knowledge has contributed to the proliferation of myths and resistance. Italy and Cyprus are currently experiencing reduced levels of misinformation; however, proactive measures are still required. A public awareness campaign grounded in scientific evidence, tailored to address local concerns, can pre-empt the propagation of misinformation and cultivate trust.

II.3.5. Inadequate community engagement

Community engagement is a notable barrier in Spain (but probably also in Romania), where public participation in water-related decision-making is limited. Cyprus presents a mixed picture with manageable issues, while Italy does not face this barrier. Nevertheless, the establishment of participatory governance mechanisms, such as Local Water Forums, has the potential to enhance local ownership and mitigate resistance, particularly in countries with less pronounced traditions of civic engagement.

II.3.6. Exacerbation of inequalities

Concerns regarding the exacerbation of inequalities are more pronounced in Italy, Romania and Spain, particularly in rural or underserved regions. In Cyprus, these concerns are of minor significance. Public resistance in this context is associated with affordability, uneven access, and trust. The demonstration of the affordability and accessibility of AWR technologies through pilot projects and transparent planning has the potential to reduce perceived risks of inequality.

III AWARD policy recommendations on increasing social awareness and acceptability of AWR

Raising public awareness and enhancing social acceptability are critical to the successful adoption and long-term sustainability of AWR. Despite technical advances, public concerns about health risks, costs, environmental impacts or access inequalities pose major barriers. Addressing these concerns requires targeted, inclusive communication strategies and community engagement approaches that build trust, transparency and a sense of shared ownership. The following recommendations aim to foster an informed and supportive social environment in which AWR solutions can be better understood and accepted. These are soft policy measures that facilitate the adoption of AWR.

III.1. Embed water literacy into climate and environmental education

It is imperative that global water issues be incorporated into formal and informal education at all levels, from primary and secondary education to universities, vocational training and community programs. This integration is crucial for raising awareness of the global and local water challenges confronting us. The utilisation of real-world illustrations and interactive formats is important in elucidating the interconnections between water, climate change, and individual behaviour, thereby cultivating sustained and informed engagement. All these techniques/ methods could be used also to demonstrate the correlation between water utilisation and its impact on health, financial viability, and community resilience. Water literacy can help the informed decision-making process among citizens and foster confidence in innovative endeavours.

III.2. Empower communities by building trust and designing local and regional awareness campaigns

It is vital to provide support to civil society and community groups, who function as pivotal conduits between experts and citizens in the promotion of sustainable water solutions. The creation of inclusive platforms, such as forums, workshops and pilot sites, is recommended to foster community-based dialogues and individual understanding. Promoting the success of AWR community-led initiatives is crucial for establishing trust and encourage the broader adoption of alternative water sources. Development of localized communication campaigns is important to address misinformation and raise awareness about the safety and benefits of AWR technologies

In regions where citizen satisfaction is low or uncertainty is high, priority should be given to the trust-building process through consistent, people-focused communication. The utilisation of trusted local messengers, including local ambassadors, is recommended for the effective dissemination of water strategies and the strengthening of community networks. It is important to furnish digital toolkits and physical forums that facilitate straightforward and significant engagement, firmly anchored within the local water context. The development of locally tailored awareness campaigns in areas exhibiting low public engagement is important. These campaigns should employ local languages, storytelling, social media, and interactive tools to maximise impact. The human and environmental impacts of water scarcity must be emphasised, and the promotion of alternative sources such as rainwater harvesting as practical solutions is essential. It is imperative to promote the principle of shared responsibility and encourage community action in order to facilitate enduring behavioural change.

III.3. Develop accessible and citizen-friendly communication platforms

It is recommended that user-friendly communication platforms be promoted, such as digital applications (used by citizens), dashboards (at water utilities) and bulletin boards (at municipalities). These platforms should provide clear, accessible updates on the usage of AWR and water quality. It is imperative to prioritise inclusive, intuitive design to ensure the reach of all citizens, including those with limited digital access or literacy, thereby fostering trust, transparency, and engagement.

III.4. Promote local demonstration projects with citizen involvement for local community benefits

Equitable access to AWR requires affordable, community-based pilots that demonstrate social and environmental benefits. Visible projects like rainwater harvesting at schools or farms, supported by open days and NGO partnerships, build trust and awareness. Shifting from consultation to co-creation involves citizens in planning and monitoring, aligning innovation with local needs. Integrating these participatory methods into regional planning strengthens community ownership and links AWR to local benefits such as savings and green jobs. Strengthened Local Water Forums—co-designed and co-led with citizens—are vital for trust, inclusiveness, and lasting support.

IV Evidence and analysis on social awareness study

IV. 1. Methodology

The AWARD Policy Brief was developed based on an extensive cross - country report on social awareness and acceptability survey, elaborated under Task 2.2. (available on the AWARD website). It involved surveying a total of 439 citizens from all demo case countries and other countries from the Lower Danube Basin. The survey was conducted both online (429) and with direct interviews (10). Data collection lasted from March 2024 until December 2024. Each AWARD partner translated the survey to local language. Respondents were randomly selected, representing the citizens without prior knowledge or awareness of AWR. The conversion of the results into a study was done based on a comparative analysis, where key similarities were highlighted

and trends were identified. The social barriers listed in Table 1, together with the findings from the cross-country report justify the need for the AWARD recommendations included in this Policy Brief.

IV.2. Social awareness and acceptability findings

While most respondents report moderate to high awareness of global water challenges such as pollution and scarcity, many also admit the lack of a deeper understanding of the causes and impacts. While this reflects a strong baseline of public awareness, it also highlights the need for more structured education to bridge the gap between surface-level recognition and informed engagement, particularly in countries that are less exposed to direct water stress.

Compared to general water issues, awareness of AWR is considerably lower across all regions. Even in countries experiencing high levels of water stress (e.g. Italy, Spain and Cyprus), familiarity with specific solutions is uneven. However, there is a widespread willingness to support AWR initiatives, revealing untapped potential for public engagement if initiatives are better publicised and more information is made available.

Limited or unclear public communication about AWRs from utilities and water authorities contributes to confusion, low trust and missed opportunities for engagement. While people are largely unaware of how AWRs are managed or promoted, they do show a strong demand for better information and opportunities to participate. The success of future projects hinges on transparent communication and inclusive, well-designed engagement tools, such as Local Forums (or included in Local Climate Forums maybe, when available).

Although satisfaction with basic water services is moderate, satisfaction with innovative water solutions is low, often due to their low visibility and lack of public involvement. Citizens are eager to be involved in local water governance and innovation (Local Water Forums), but require more accessible information, trust in institutions, and clear and transparent pathways to participation. Digital tools and climate-smart strategies must be paired with citizen-centric communication and engagement to succeed.

AWARD

Alternative Water Resources and Deliberation processes to renew water supply strategic planning

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Funded by the European Union

AWARD has received funding from the European Union's under Horizon Europe programme, Grant agreement n° 101136987